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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,597	05/29/2001	Daniel Abugov	19111.0037	4131

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EXAMINER

ROBINSON, GRETA LEE

ART UNIT	PAPER NUMBER
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2168

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,597

Applicant(s)

ABUGOV ET AL.

Examiner

Greta L. Robinson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-15 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 20, 2005 has been entered.

2. Claims 1, 13, 20 and 21 have been amended. Claims 2, 3, 5, 6 and 16 are cancelled.

Drawings

3. The drawings were received on September 12, 2003. These drawings are acceptable.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 4, 7-15, 17-19 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recites a "method

of determining positional relationships among objects represented in a database, the method comprising: defining a plurality of tiles ... identifying tiles that do not intersect ... comparing tiles of the first object with tiles of a second object ... and determining whether the at least one tile of the second object ... intersects ..." [note independent claim 1]. The claim appears to be an abstract idea with no tangible outcome and does not fall within the categories of patentable subject matter under 35 USC 101. With respect to claims 1, 4, 7-15, 17-19 and 22 the specification does not state how the method is implemented. Also, it is unclear as to how the claim relates to defined terms within the disclosure (i.e. primary filter and secondary filter) and therefore does not appear to be tangible see page 19 lines 17-22 and page 26.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 4, 7-15 and 17-24 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The "primary filter" and "secondary filter" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The primary filter and secondary filter appear to be an important concept in determining the intersection and comparing the tiles [note independent claims original

and amended]. Support for the importance of this limitation can be found on the following pages in the disclosure: background of the invention page 3 lines 5-10; detailed description of the invention page 18 lines 6-11 "The first part of the process is carried out utilizing a primary filter condition to compare the tiles ..."; page 19 lines 17-22 "the primary filter can identify configurations where the objects share at least one point in common"; page 20 lines 1-20 "starting the analysis by subjecting the objects to a primary filter is that as tiles are compared ... the secondary filter condition"; page 21 lines 13-23 "the secondary filter will mathematically compare the geometries ... the present invention utilizes the tile markings and the results of the primary filter to reduce the set of objects to which the secondary filter must be applied", page 22 lines 18-22 and page 26 lines 12-19.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 4, 7-15, and 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 the following limitation is vague and unclear: "identifying tiles that do not intersect an object while all of a boundary of the object lies outside the tiles and by identifying tiles that intersect a boundary of the object" [see claim 1 lines 4-6].

The phrase is unclear and appears incomplete. Also it would appear that if the boundary

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of the object lies outside of the tile there would not be an intersection. Independent claims 20 and 21 contain similar limitation [note: claim 20 lines 8-10; claim 21 lines 8-10]; and therefore are rejected under the same rationale. Claims 4, 7-15, 17-19, 22, 23 and 24 are rejected based on dependency.

Regarding claims 1, 20 and 21 the following limitation is vague: "while all of the boundary of the second object lies outside the tile" [see: claim 1 lines 10-12; claim 20 lines 14-16; and claim 21 lines 14-16]. Claims 4, 7-15, 17-19, 22, 23 and 24 are rejected based on dependency.

Response to Arguments

9. Applicant's arguments filed September 20, 2005 have been fully considered but they are not persuasive.

In the response Applicant argued the following:

(a) Claims 1, 20 and 21 have been amended to correctly recite identifying certain tiles do not intersect an object.

(b) Although the specific terminology (primary filter and secondary filter) has been deleted, each step is still present and defined within the claims and distinctly and separately stated.

In response to Applicants arguments the examiner respectfully maintains the rejection. Regarding argument (a), note although the claim has been amended, the phrase is still unclear. Note rejection under 35 USC 112 second paragraph supra.

Regarding argument (b), Applicant has not mapped or specifically stated how the terms "primary filter" and "secondary filter" are interpreted within the claims although deleted.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kothuri et al. US patent 6,879,980 B1

Goldensher et al. US Patent 6,282,540 B1

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greta L. Robinson whose telephone number is (571)272-4118. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Handwritten signature of Greta Robinson, Primary Examiner, dated March 1, 2006. The signature is in cursive and includes a long horizontal flourish at the end.

Greta Robinson
Primary Examiner
March 1, 2006